

# UniFi - Powering a US-8 Switch and Connected Devices

## Overview

This article provides different options for powering a UniFi Switch 8-port (US-8), and connected 48V and 24V devices.

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## Introduction

The UniFi [US-8 Switch](#) provides flexible input options and a single PoE output. The switch may be powered by a power cord or PoE on port 1, and provides a single PoE output on port 8 that is dependent on input power. PoE Out is disabled by default, but can be activated in the UniFi Network Controller.

The following table shows passthrough voltage on PoE Out for supported power inputs:

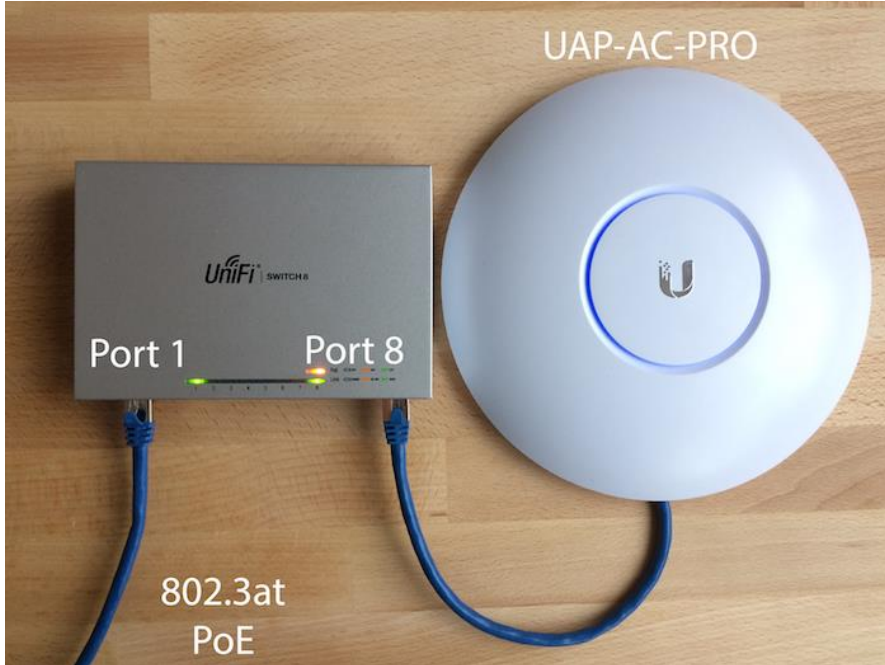
PoE in (Port1)	Passthrough PoE Out (Port 8)
802.3at	48V Passive
802.3af	48V Passive. However, the 803.3af power source might not provide enough power budget to power the switch and have enough left to power a device on port 8.
48V Passive	48V Passive
DC Input (Power Adapter)	Passthrough PoE Out (Port 8)
48VDC Input (Included)	48V Passive

## Powering 48V Devices

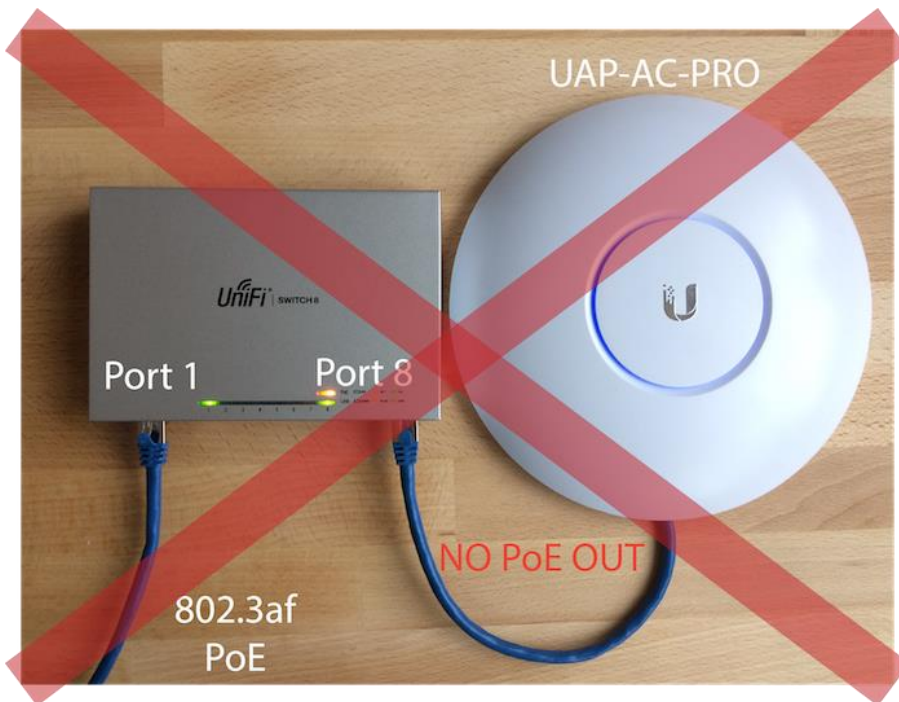
When powered by PoE+, 48V passive PoE, or the included 48V Power Adapter, the US-8 will output 48V Passive, powering many UniFi Devices—including the [UAP-AC-PRO](#). Note that the US-8 cannot be used to power devices requiring greater than 12W, such as the [UAP-AC-EDU](#).

**WARNING:** The US-8 provides 48V Passive power from port 8 when one of the PoE inputs mentioned in the table above are present in port 1. Attempting to connect a device that is not compatible with a 48V Passive power method can irreversibly damage the connected device.

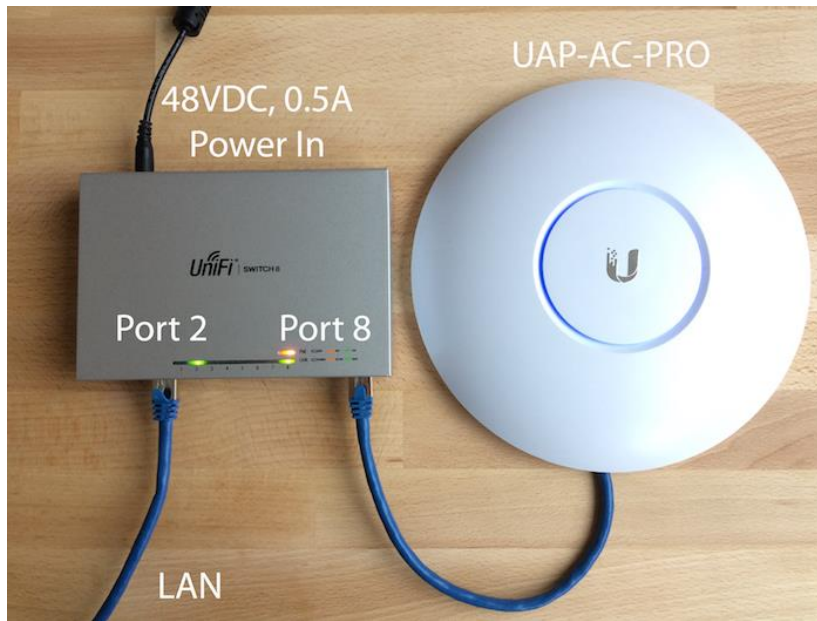
**A Ubiquiti 48V Device (UAP-AC-PRO) Powered by 802.3at PoE Passthrough:**



**48V Devices CANNOT be powered by 802.3af PoE passthrough:**



**48V Device powered by included 48VDC power adapter:**

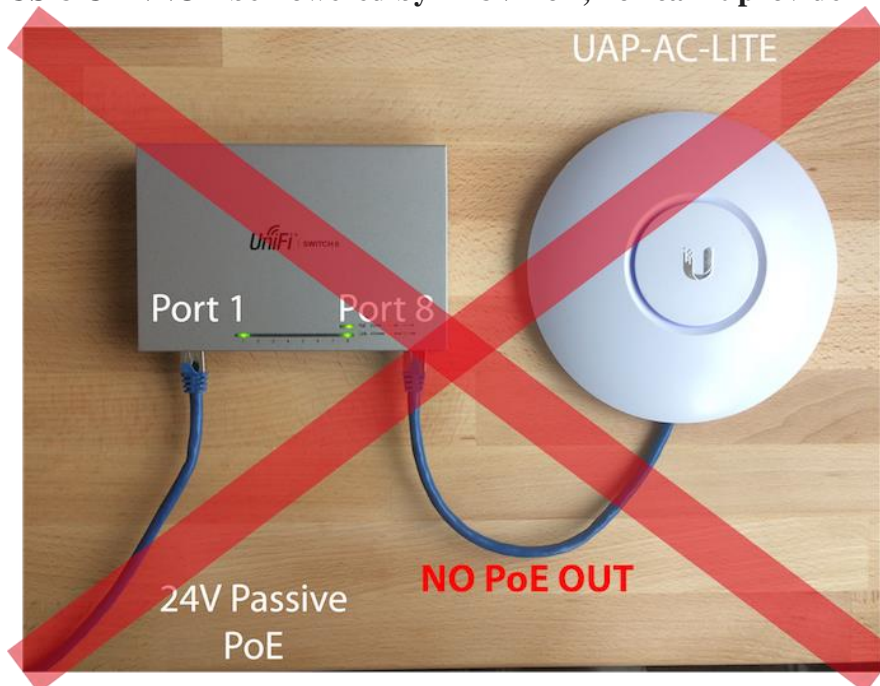


## Powering 24V Devices

24V Power input is **not** supported on US-8. Several UniFi devices—including UAP-AC-LITE and UAP-AC-LR—run on 24V Passive PoE.

**NOTE:** All UAP-AC-LRs with a date code of 1634 or board revision 17 and following ones support 802.3af in addition to 24V passive. All UAP-AC-LITEs with a date code of 1634 or board revision 33 and following ones support 802.3af in addition to 24V passive. Board Revision information can be found in the UniFi Network Controller within the properties panel of each UAP in the **Details > Overview** section. Not sure what your APs date code is? [Where is my MAC ID and Date Code?](#)

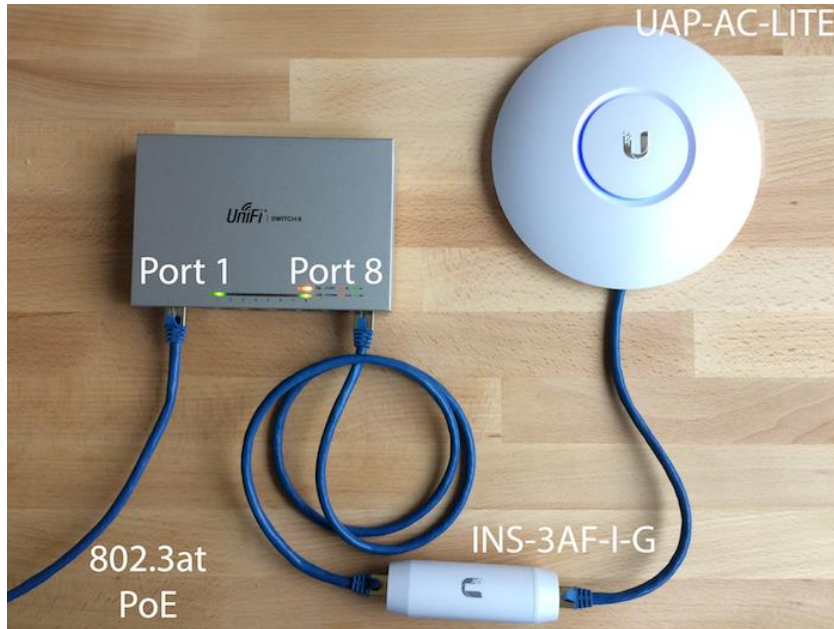
**US-8 CANNOT be Powered by 2 48V PoE, nor can it provide 24V power to any device:**



In order to power a 24V passive device on PoE Out, we recommend using a 48V power input, then connecting a 802.3 gigabit adapter (INS-3AF-I-G or INS-3AF-O-G) to PoE Out to convert 48V PoE Out to 24V. Indoor and outdoor 802.3 gigabit adapters are available on the [UI Store: Accessories section](#). As with 48V devices, 802.3af PoE will power the switch, but not connected devices.

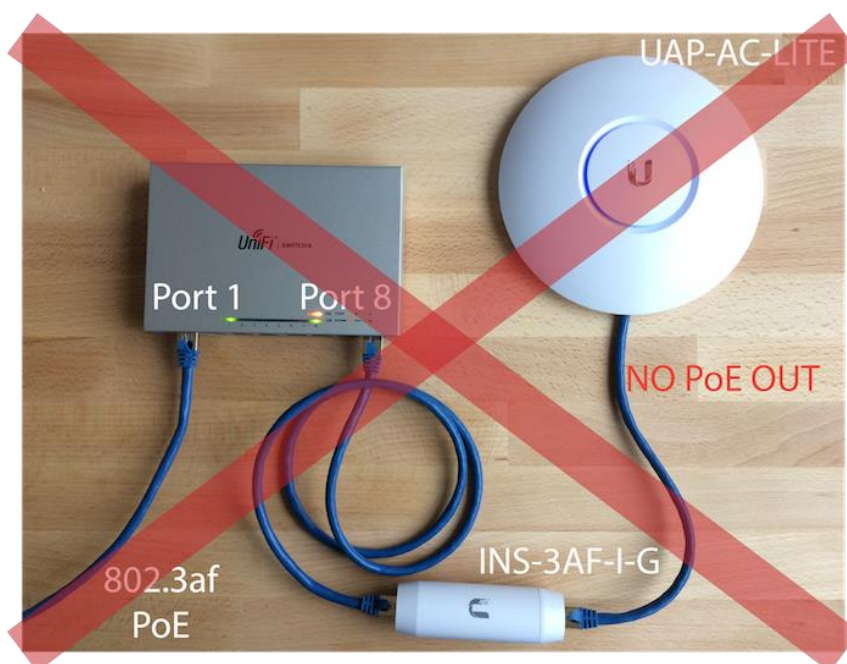
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**24V Passive Device Powered by 802.3at PoE Passthrough w/ [INS-3AF-I-G](#):**



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**24V Devices CANNOT Be Powered By 802.3af PoE Passthrough with INS-3AF-I-G:**





**24V Passive Device Powered by Included Power Adapter w/ INS-3AF-I-G:**

